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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|-------------------------------------|-----------------|----------------------|-------------------------|-----------------|
| 10/004,399 | 10/30/2001 | Thomas G. Cooper | 017516-000130US | 5886 |
| 20350 | 7590 03/19/2004 | | EXAMINER | |
| TOWNSEND AND TOWNSEND AND CREW, LLP | | | LEUBECKER, JOHN P | |
| TWO EMBARCADERO CENTER EIGHTH FLOOR | | ART UNIT | PAPER NUMBER | |
| SAN FRANCISCO, CA 94111-3834 | | | 3739 | |
| | | | DATE MAILED: 03/19/2004 | 14 |

Please find below and/or attached an Office communication concerning this application or proceeding.

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|--|--|--|---|
| : | Application No. | Applicant(s) | |
| | 10/004,399 | COOPER, THOMAS G. | |
| Office Action Summary | Examiner | Art Unit | _ |
| | John P. Leubecker | 3739 | |
| The MAILING DATE of this communication Period for Reply | appears on the cover sheet w | ith the correspondence address | |
| A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply specified above, the maximum statutory per - Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the m earned patent term adjustment. See 37 CFR 1.704(b). | N. R 1.136(a). In no event, however, may a s. reply within the statutory minimum of thir riod will apply and will expire SIX (6) MOR atute, cause the application to become Al | reply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). | |
| Status | | | |
| 1) Responsive to communication(s) filed on 19 | 9 February 2004. | | |
| | This action is non-final. | | |
| 3) Since this application is in condition for allo | wance except for formal mat | ers, prosecution as to the merits is | |
| closed in accordance with the practice unde | er <i>Ex part</i> e <i>Quayl</i> e, 1935 C.[|). 11, 453 O.G. 213. | |
| Disposition of Claims | | | |
| 4) Claim(s) 1-5 and 8-10 is/are pending in the 4a) Of the above claim(s) is/are without 5) Claim(s) is/are allowed. 6) Claim(s) 1-5 and 8-10 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and | drawn from consideration. | | |
| Application Papers | | | |
| 9)☐ The specification is objected to by the Exam 10)☒ The drawing(s) filed on 19 February 2004 is Applicant may not request that any objection to a Replacement drawing sheet(s) including the con 11)☐ The oath or declaration is objected to by the | /are: a)□ accepted or b)⊠ the drawing(s) be held in abeyal rection is required if the drawing | nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d). | |
| Priority under 35 U.S.C. § 119 | | | |
| 12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of: 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International Bur * See the attached detailed Office action for a | ents have been received. ents have been received in A priority documents have been reau (PCT Rule 17.2(a)). | application No received in this National Stage | |
| Attachment(s) | | | |
| 1) Notice of References Cited (PTO-892) | | Summary (PTO-413) s)/Mail Date | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date | | nformal Patent Application (PTO-152) | |

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Drawings

1. The drawings were received on February 19, 2004. These drawings are not accepted.

The replacement sheet for Figure 2 is not approved because it does not show the coupling of the mounting joint to a wall or ceiling as an alternative to mounting it to the operating table. According to the specification, the coupling of the mounting joint to a wall or ceiling disposes the mounting joint over the operating table and patient. Such mounting is not disclosed in combination with mounting the joint to the operating table, as shown in proposed Figure 2. Thus, proposed Figure 2 suggest a structure which is inconsistent with the original disclosure.

- 2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: At least pages 11 and 12 of the specification mention element numerals 62, 65 and 140 but they can not be found in the drawings. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- 3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: Numeral 54 in Figure 3A can not be found in the specification. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Wang et al. (U.S. Pat. 5,855,583).

Wang et al. disclose the device as previously described in numbered paragraph 3 of the previous Office Action, paper number 8. Applicant has amended claim 1 to specify that the instrument is *removably* coupled to the distal wrist. However, Wang et al. anticipates this (note Figures 18 and 19, and column 17, lines 49-64). Applicant also has added the limitation of "fixing the orientation of the mounting joint during the surgical procedure". As pointed out in the previous Office Action, any of joints Js1 through Js4 (Fig.3) anticipate a mounting joint *for positioning and fixing* the manipulator arm. Any of these joints, when in the desired position, will "fix" the manipulator arm. Furthermore, joint Js4 is a spring loaded passive joint (col.5, lines 56-63) which inherently is fixed when no force is applied to move it.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. in view of Madhani et al. (U.S. Pat. 5,807,377) for the reasons set forth in numbered paragraph 5 of the previous Office Action, paper number 8.

Response to Arguments

8. Applicant's arguments filed February 19, 2004 have been fully considered but they are not persuasive.

Although not explicitly or clearly stated, Applicant implies that since Wang et al. disclose "active" joints (motor driven), these joints can not be fixed and thus can not anticipate the step of fixing these joints (note last full paragraph of page 5 to second full paragraph of page 6 of Applicant's remarks filed February 19, 2004). This is not understood by the Examiner. Is Applicant implying that the manipulator arm, and thus the joints, of Wang et al. is in a continual state of motion and thus never stops? If this is the case, then yes, these joints would not be fixed. However, Applicant would need to provide evidence of this in the Wang et al. reference since this would go against the conventional operation of surgical robotic arms. Or is Applicant arguing that some of Wang's joints are not passive? Nevertheless, some of them are and this is not being specified in the claims. In any event, the Examiner takes the position that when the arm is in the desired position, the joints not moving and are therefore fixed.

It is noted that claims 2-5 and 8 are alleged by Applicant to be allowable as depending from claim 1. No further mention of these claims is deemed necessary.

With respect to the rejection of claims 9 and 10 over Wang et al. in view of Madhani et al., Applicant failed to address merits of the rejection but instead discounted such rejection on the basis of a lack of other limitations. Therefore, the Examiner will consider this as an admission that the merits of the original rejection was proper.

Conclusion

9. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (703) 308-0951. The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (703) 308-0994. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Primary Examiner Art Unit 3739

jpl